

REMARKS

The following remarks are presented in response to the Final Office Action of October 5, 2006. The Applicant respectfully requests reconsideration and allowance of the present application in view of these remarks.

Regarding the 35 U.S.C. § 102(b) Rejection

Claims 1, 7-9, 13, 27, 30, 31, 33-37, 40, 41, and 43-46 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Published Application No. 2005/0066063 to Grigorovitch et al. (referred to below as "Grigorovitch"). Applicant respectfully traverses this rejection for the following reasons.

Consider independent claim 1, reproduced in full as follows, with emphasis added:

1. A method for reading information from an optical storage medium, comprising:
 - providing a cache memory having multiple cache segments;
 - receiving a request for information stored on the optical storage medium;
 - determining whether the requested information is stored in one of the cache segments;
 - retrieving the requested information from said one of the cache segments if the information is determined to be stored in the cache memory; and
 - retrieving the requested information from the optical storage medium itself if the information is determined not to be stored in the cache memory,

wherein the cache memory includes a first group of at least one cache segment dedicated to handling a first type of information, and a second group of at least one cache segment dedicated to handling a second type of information, and

wherein the first type of information pertains to information that is designated for retrieval in a streaming transfer mode, and the second type of information pertains to information that is designated for retrieval in a bulk transfer mode.

Grigorovitch does not disclose the subject matter of claim 1. For example, Grigorovitch at least does not disclose the bold-highlighted feature of claim 1, in combination with the other features of claim 1 when read as a whole.

The Patent Office identifies a portion of paragraph No. 3 of Grigorovitch as having relevance to the bold-highlighted portion of claim 1. Paragraph No. 3 of Grigorovitch states, in full:

[0003] A basic streaming media file typically includes at least two streams: a video stream and an audio stream. More complex streaming media file will include multiple video and/or audio streams, each stream being encoded at a different bit rate (i.e., multi-bit rate encoding). For example, a given portion or stream of video may be stored in a multiple bit rate encoded streaming media file in six different video streams, each stream being encoded at a different bit rate. When a client requests the streaming media file from the server, a determination is then made as to the bandwidth of the link between the server and the client. One of the six video streams and an audio stream are then selected for transmission to the client, based on predetermined bandwidth criteria. For example, the video and audio streams may be selected such that their combined bit rates are less than a predetermined percentage of

1 the available link bandwidth. If, at some point in the streaming process, the link bandwidth
2 between the server and the client increases or decreases, a different combination of audio and
3 video streams is then selected to meet the predetermined bandwidth criteria. This type of
4 'stream selection' from a multi-bit rate encoded streaming media file based on available
5 bandwidth is commonly referred to as 'intelligent streaming.'

6
7 This passage describes intelligent streaming involving "stream selection" from a
8 multi-bit rate encoded streaming media file based on available bandwidth. In contrast,
9 claim 1 recites, in part, that "the cache memory includes a first group of at least one
10 cache segment dedicated to handling a first type of information, and a second group of at
11 least one cache segment dedicated to handling a second type of information," "wherein
12 the first type of information pertains to information that is designated for retrieval **in a**
13 **streaming transfer mode**, and the second type of information pertains to information
14 that is designated for retrieval **in a bulk transfer mode**." Intelligent streaming, as
15 discussed in paragraph No. 3 of Grigorovitch, involves switching between multiple
16 **streams**, and hence pertains to a streaming transfer mode. As such, paragraph No. 3 of
17 Grigorovitch does not disclose a cache memory that includes "a second group of at least
18 one cache segment dedicated to handling a second type of information," where that
19 "second type of information pertains to information that is designated for retrieval in a
20 **bulk transfer mode**." To be more explicit, streaming is not bulk transfer, as
21 Grigorovitch explains in page 2, second column, first full sentence.

1 In reply to this argument, the Final Office Action states in paragraph No. 18:
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3 With regards to Claim 1, the Applicant alleges that Grigorovitch does not disclose
4 the bold-highlighted portion of claim 1, which happens to be the original Claim 4. However,
5 the examiner would like to point out that the stream transfer mode is fully mentioned, and
6 there is also multi-bit rate coded streaming, which is synonymous to bulk transfer mode. 'a
7 set of counters associated respectively with each memory location and that one of the set of
8 counters is incremented when a packet identifier match is made'. The Applicant further
9 alleges that 'Stone does not teach or suggest the incrementing step of claim 1'. The
10 Examiner would like to point to the fact the rejection above is 35 U.S.C. 103(a) rejection,
11 which allows for the combination of two prior arts to achieve the functionality of the claimed
12 invention. Therefore, the Applicant's arguments are moot in view of the prior art.
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14 This paragraph makes two points. As to the first point (regarding the concept
15 of "bulk transfer mode"), paragraph No. 3 of Grigorovitch unambiguously identifies
16 multi-bit rate encoding as a species of **streaming**. For instance, Grigorovitch states
17 in paragraph No. 3 that "More complex **streaming** media file will include multiple
18 video and/or audio **streams**, each stream being encoded at a different bit rate (i.e.,
19 **multi-bit rate encoding**)" (emphasis added). This precludes the Patent Office's
20 interpretation of "bulk transfer mode" as Grigorovitch's multi-bit rate streaming.
21 More specifically, to repeat, claim 1 recites a "streaming transfer mode" and "a bulk
22 transfer mode." Whatever interpretation the Patent Office attaches to "bulk transfer
23 mode," it is clear from the logical structure of the claim alone that "bulk transfer
24 mode" is something other than "streaming transfer mode," and not a species thereof.
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1 To provide an analogy, suppose a claim recites two types of fruit, such as an apple
2 and an orange. It would be a logically inconsistent interpretation, and therefore an
3 inappropriate interpretation, to construe a McIntosh apple as the recited "orange," as
4 a McIntosh apple is a species of an apple, and not a separate category of fruit.
5 Finally, the Patent Office states that multi-bit rate streaming is "synonymous" with
6 bulk transfer mode, but Grigorvitch does not establish this equivalence, and, indeed,
7 does not even mention "bulk transfer." **The Examiner is respectfully requested to**
8 **explain in what manner multi-bit rate streaming is considered synonymous with**
9 **bulk transfer mode.**

10 As to the second point (regarding the reference to "Stone" and a 35 U.S.C.
11 § 103 rejection), the Applicant does not understand the Patent Office's position.
12 Claim 1 was rejected under 35 U.S.C. § 102, rather than 35 U.S.C. § 103. Further,
13 claim 1 was rejected based on a single reference to Grigorovitch, rather than Stone.
14 **If the Patent Office maintains this rejection, it is requested to clarify the Office**
15 **Action's references to Stone and 35 U.S.C. § 103.**

16 For the above-identified reasons, the Applicant submits that the rejection of
17 claim 1 is improper, and respectfully requests that it be withdrawn. Independent
18 claims 14, 27, and 37 recite subject matter that is related to that set forth in claim 1.
19 Therefore, independent claims 14, 27, and 37 are not disclosed by Grigorovitch for
20 similar reasons to those set forth above for claim 1.
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1 Now consider independent claim 31. This claim recites in full (with
2 emphasis):

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4 31. A method for reading information from a storage medium, comprising:
5 providing a cache memory;
6 receiving a request for information stored on the storage medium;
7 determining whether the requested information is stored in the cache memory;
8 retrieving the requested information from the cache memory if the information is
9 determined to be stored in the cache memory, including:
10 moving a pointer associated with the cache memory ahead to define free cache
11 space;
12 pre-fetching information from the storage medium; and
13 filling the pre-fetched information in the free cache space of the cache memory; and
14 retrieving the requested information from the storage medium itself if the
15 information is determined not to be stored in the cache memory.
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17 Grigorovitch does not disclose the subject matter of claim 31. For example,
18 Grigorovitch at least does not disclose the bold-highlighted feature of claim 31, in
19 combination with the other features of claim 31 when read as a whole.

20 The Patent Office identifies a portion of paragraph No. 49 of Grigorovitch as
21 having relevance to the bold-highlighted portion of claim 31. Paragraph No. 49 of
22 Grigorovitch states, in full:
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[0049] The free pages record 442 includes a number of table record data fields 441, including a number of free pages data field 443, a first external block ID field 445, and a free page record field 447. The number of free pages data field 443 includes an identifier indicating the number of free pages in the cache file. The free page record field 447 includes a table particularly identifying the various free data pages in the cache file. In the case where the number of free data pages exceeds the number of free data pages that can be specified in the free page record field 447, the first external block ID includes a pointer to a page that includes a data structure identifying additional free data pages.

This passage describes, in part, that a pointer is provided in “the case where the number of free data pages exceeds the number of free data pages that can be specified in the free page record field 447,” where this pointer simply points “to a page that includes a data structure identifying additional free data pages.” In contrast, claim 31 recites, in part, an operation of “**moving a pointer** associated with the cache memory **ahead** to define free cache space.” The provision of providing a “pointer to a page that includes a data structure” (as disclosed in Grigorovitch) cannot be interpreted as **moving a pointer ahead** (as recited, in part, in claim 31).

In response to this argument, the Office Action states in paragraph No. 31 that:

With regards to Claim 31, the Applicant alleges that Grigorovitch does not disclose the bold-highlighted portion of Claim 31, which state ‘moving a pointer associated with the cache memory ahead to define free cache space’. However, the Examiner maintains that Section 0049, lines 8-12 state the following which teaches the limitation of the claim: State the following: ‘In the case where the number of free data pages exceeds the number of free

1 data pages that can be specified in the free page record field 447, the first external block ID
2 includes a pointer to a page that includes a data structure identifying additional free data
3 pages' Therefore, the Applicant's arguments are moot in view of the prior art.

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5 This argument does not address the technical point that has been raised above. As
6 stated above, Grigorovitch's pointer points to a location where additional data pages can
7 be found. The role of this kind of pointer is to statically reference another location, not to
8 be moved ahead in the manner claimed. **If this rejection is repeated, the Patent Office**
9 **is asked to explain how a mere pointer to data pages is being interpreted as the act**
10 **of "moving a pointer associated with the cache memory ahead to define free cache**
11 **space."**

12 For the above-identified reasons, the Applicant submits that the rejection of claim
13 31 is improper, and respectfully requests that it be withdrawn. Independent claim 41
14 recites subject matter that is related to that set forth in claim 31. Therefore, independent
15 41 is not disclosed by Grigorovitch for similar reasons to those set forth above for claim
16 31.

17 The remainder of the claims rejected under 35 U.S.C. § 102 depend variously
18 from the above-identified independent claims. These claims are not disclosed by
19 Grigorovitch for at least the reason that they incorporate the subject matter of their
20 respective independent claims.

21 As stated in MPEP § 2131, "A claim is anticipated only if each and every element
22 as set forth in the claim is found, either expressly or inherently described, in a single prior
23 art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053
24 (Fed. Cir. 1987). As noted above, Grigorovitch fails to disclose all of the elements in the
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1 independent claims. Accordingly, Grigorovitch fails to anticipate any of the claims under
2 35 U.S.C. § 102.

3 For at least the above-identified reasons, the Applicant respectfully requests the
4 Patent Office to withdraw the 35 U.S.C. § 102 rejection based on Grigorovitch.

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6 *Regarding the 35 U.S.C. § 103 Rejections*

7 Claims 2, 15, 32, and 42 are rejected under 35 U.S.C. § 103(a) as being
8 unpatentable over Grigorovitch in view of U.S. Published Application No. 2002/0135585
9 to Dye et al. (referred to as “Dye” below). Claims 5, 14, 16, 18, 20-22 26, 28, and 38 are
10 rejected under 35 U.S.C. § 103(a) as being unpatentable over Grigorovitch in view of
11 U.S. Published Application No. 2003/0109313 to Gavin (referred to as “Gavin” below)
12 and Japanese patent document No. 2001/203995 to Bae et al. (referred to as “Bae”
13 below). Claims 2, 15, 32, and 42 are rejected under 35 U.S.C. § 103(a) as being
14 unpatentable over Grigorovitch in view of U.S. Published Application No. 2003/0041214
15 to Hirao et al. (referred to as “Hirao” below). Claims 10-12 and 23-25 are rejected under
16 35 U.S.C. § 103(a) as being unpatentable over Grigorovitch in view U.S. Patent No.
17 6,425,057 to Cherkasova et al. (referred to as “Cherkasova” below) and U.S. Published
18 Application No. 2005/0166006 to Talbot et al. (referred to as “Talbot” below). Applicant
19 respectfully traverses each of these rejections for the following reasons.

20 As a first preliminary aside, it is noted that Applicant’s first Response
21 inaccurately enumerated the various 35 U.S.C. § 103(a) rejections made in the first Office
22 Action. The present Response rectifies this inadvertent error by correctly listing and
23 responding to the various bases for rejection under 35 U.S.C. § 103(a).
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1 As a second preliminary matter, claim 16 has been canceled in the previous
2 Response. Therefore, the Applicant submits that the rejection of this claim in the present
3 application is a moot issue.

4 As to a third preliminary matter, there is no rejection of claims 6, 19, 29, and 39
5 in the body of the Office Action, yet the cover sheet of the Office Action indicates that
6 these claims have been rejected. The Patent Office may have intended to reject these
7 claims based on the combination of Grigorovitch and Hirao. In other words, the Patent
8 Office may have intended to apply Grigorovitch and Hirao to claims 6, 19, 29, and 39,
9 rather than claims 2, 15, 32, and 42. In any event, the Patent Office is requested to clarify
10 the status of claims 6, 19, 29, and 39 in the next correspondence with the Applicant.

11 As to the rejections, the subject matter of the Grigorovitch published application
12 and the present claimed invention were, at the time the invention was made, subject to an
13 obligation of assignment to Microsoft Corporation of Redmond, Washington. This is
14 supported by the assignment documents filed for the Grigorovitch application and the
15 present application, copies of which were submitted as Exhibit A in the previous
16 Response. Accordingly, pursuant to the provisions of 35 U.S.C. § 103(c) and MPEP
17 § 706.02(I), the Grigorovitch document is not a valid reference against the claimed
18 invention. And since the non-prior art Grigorovitch document is an integral part of each
19 of the Office Action's multiple 35 U.S.C. § 103(a) rejections, the Office Action fails
20 establish a prima facie case of obviousness for any of the 35 U.S.C. § 103(a) rejections.

21 In reply to this argument, the Final Office Action states in paragraph No. 20:

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23 With regard to the 103(a) rejections, the Applicant alleges that Grigorovitch is not
24 prior art due to its lack of an establishment of prima facie case of obviousness, as well as its
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1 common assignee with the claimed invention. However, Section 706.02(l) 1 (R-3] of the
2 MPEP states the following: The burden of establish that subject matter is disqualified as prior
3 art is placed on applicant once the examiner has established a prima facie case of obviousness
4 based on the subject matter. For example, the fact that the reference and the application have
5 the same assignee is not, by itself, sufficient evidence to disqualify the prior art under 35
6 U.S.C. 103(c). There must be a statement that the common ownership was 'at the time the
7 invention was made.' Since the fact that Grigorovitch was shown to in fact teach the
8 limitations of the Independent claims above, a prima facie case of obviousness was
9 established. Therefore, the Applicant's arguments are moot in view of the prior art.

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11 This argument is legally and factually misplaced. First, the first Response
12 submitted proof that the Grigorovitch application and the present invention were
13 commonly owned. Second, the first Response made the necessarily statement required
14 by the MPEP, namely, "The subject matter of the Grigorovitch published application and
15 the present claimed invention were, **at the time the invention was made**, subject to an
16 obligation of assignment to Microsoft Corporation of Redmond, Washington" (as
17 repeated verbatim herein, with emphasis). **This is all that the rules require in order to**
18 **remove the Grigorovitch document as a reference applied in the various Section 103**
19 **rejections.**

20 For least the above-identified reasons, the Applicant requests that the multiple 35
21 U.S.C. § 103(a) rejections be withdrawn. The non-prior art status of the Grigorovitch
22 application is a matter of stark clarity in favor of Applicant.

1 *Conclusion*

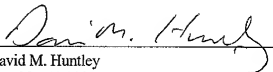
2 The arguments presented above are not exhaustive; Applicant reserves the right to
3 present additional arguments to fortify its position. Further, Applicant reserves the right
4 to challenge the alleged prior art status of one or more documents cited in the Office
5 Action.

6 In conclusion, all objections and rejections raised in the Office Action having
7 been addressed, it is respectfully submitted that the present application is in condition for
8 allowance and such allowance is respectfully solicited. The Examiner is urged to contact
9 the undersigned if any issues remain unresolved by this Amendment.

11
12 Respectfully Submitted,

13 Dated: 12-5-2006

14 By:


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